AMENDMENTS TO THE CLAIMS

1. (currently amended): A differential pixel for an imager device, said pixel comprising:

a plurality of photosensors;

a plurality of transfer transistors, each transfer transistor connected to and transferring charge from a respective photosensor;

a plurality of storage nodes, each node being coupled to a respective transfer transistor and storing charge transferred by a respective one of said plurality of photosensors; ~~and~~

a plurality of reset transistors, each reset transistor being coupled between a reset voltage source and a respective storage node; and

a differential amplifier connected to said storage nodes and outputting a plurality of differential signals for each photosensor,

wherein said differential amplifier outputs a first differential signal on a first output line, said first differential signal comprising a difference between a plurality of reset voltage signals input from said storage nodes, and outputs a second differential signal on the first output line, said second differential signal comprising a difference between a pixel voltage signal input from a first storage node and a reset voltage signal input from a second storage node.

2. (original): The pixel of claim 1 further comprising a row select transistor connected between a current source and said differential amplifier, said row select transistor causing said current source to be connected to said amplifier when activated.

3. (original): The pixel of claim 2, wherein said current source is a tail current source.

4. (original): The pixel of claim 1, wherein said amplifier is coupled to a plurality of output lines.

5. (original): The pixel of claim 4, wherein said output lines are electrically coupled to respective loads.

6. (original): The pixel of claim 1, wherein said differential amplifier comprises two source follower transistors, each source follower transistor having a gate terminal connected to a respective storage node, a first source/drain terminal connected to an output line, and a second source/drain terminal connected to a second node.

7. (original): The pixel of claim 6 further comprising:

a row select transistor; and

a current source, said row select transistor being coupled between said second node and said current source, said row select transistor causing the current source to be connected to said second node when activated.

8. (original): The pixel of claim 7, wherein said current source is a tail current source.

9. (currently amended): The pixel of claim 7 ~~further comprising a plurality of reset transistors, each reset transistor being coupled between a reset voltage source and a respective storage node,~~ wherein said reset transistors are ~~being~~ activated by a shared reset control signal such that each reset transistor is activated at a same time.

10. (original): The pixel of claim 1, wherein said plurality of transfer transistors are activated in sequence such that charges from said plurality of photosensors are transferred to said amplifier in a sequential manner.

11. (currently amended): The pixel of claim 1 ~~further comprising a plurality of reset transistors, each reset transistor being coupled between a reset voltage source and a respective storage node,~~ wherein said reset transistors are ~~being~~ activated by a shared reset control signal such that each reset transistor is activated at a same time.

12. (canceled)

13. (canceled)

14. (currently amended): The pixel of claim ~~12~~ 1, wherein said differential amplifier outputs a second differential signal on a second output line, said second differential signal comprising a difference between a plurality of reset voltage signals input from said storage nodes.

15. (original): The pixel of claim 14, wherein said differential amplifier outputs a third differential signal on the second output line, said third differential signal comprising a difference between a pixel voltage signal input from a first storage node and a reset voltage signal input from a second storage node.

16. (original): The pixel of claim 1, wherein a number of photosensors is two.

17. (canceled)

18. (original): The pixel of claim 1, wherein said plurality of differential signals comprises a plurality of differential reset signals and a plurality of differential pixel signals.

19. (currently amended): A differential pixel for an imager device, said pixel comprising:

a plurality of photosensors;

a plurality of storage nodes, each node being coupled to and storing charge from a respective one of said plurality of photosensors; ~~and~~

a plurality of reset transistors, each reset transistor being coupled between a reset voltage source and a respective storage node; and

a differential amplifier connected to said storage nodes and outputting a plurality of differential signals for each photosensor,

wherein said differential amplifier outputs a first differential signal on a first output line, said first differential signal comprising a difference between a plurality of reset voltage signals input from said storage nodes, and outputs a second differential signal on the first output line, said second differential signal comprising a difference between a pixel voltage signal input from a first storage node and a reset voltage signal input from a second storage node.

20. (original): The pixel of claim 19 further comprising a row select transistor connected between a current source and said differential amplifier, said row select transistor causing said current source to be connected to said amplifier when activated.

21. (original): The pixel of claim 19, wherein said amplifier is coupled to a plurality of output lines.

22. (original): The pixel of claim 21, wherein said output lines are electrically coupled to respective loads.

23. (original): The pixel of claim 19, wherein said differential amplifier comprises two source follower transistors, each source follower transistor having a gate terminal connected to a respective storage node, a first source/drain terminal connected to an output line, and a second source/drain terminal connected to a second node.

24. (currently amended): The pixel of claim 19 ~~further comprising a plurality of reset transistors, each reset transistor being coupled between a reset voltage source and a respective storage node,~~ wherein said reset transistors are ~~being~~ activated by a shared reset control signal such that each reset transistor is activated at a same time.

25. (canceled)

26. (canceled)

27. (currently amended): The pixel of claim ~~25~~ 19, wherein said differential amplifier outputs a second differential signal on a second output line, said second differential signal comprising a difference between a plurality of reset voltage signals input from said storage nodes.

28. (original): The pixel of claim 27, wherein said differential amplifier outputs a third differential signal on the second output line, said third differential signal comprising a difference between a pixel voltage signal input from a first storage node and a reset voltage signal input from a second storage node.

29. (original): The pixel of claim 19, wherein said plurality of differential signals comprises a plurality of differential reset signals and a plurality of differential pixel signals.

Claims 30-63 (canceled)